

EXECUTIVE SUMMARY

The Water Resources Development Act (WRDA) of 1986 authorized a 50-foot project depth for the Texas City Channel. The authorization provided for a 50-foot project depth from the offshore entrance channel through the Texas City inner harbor, but the project was put on hold in 1989 because the non-Federal sponsor was unable to secure construction funding. In a letter to the Galveston District U.S. Army Corps of Engineers (USACE) dated April 12, 2001, the non-Federal sponsor, the City of Texas City, requested reactivation of the Texas City Channel project. Their request was based on the emergence of the Shoal Point Container Terminal project and the Port of Texas City and the Texas City Channel users' renewed interest in deepening the Texas City Channel and existing turning basin to a depth of 45 feet. In correspondence dated November 12, 2002, the city of Texas City, the Port of Texas City, and the Texas City Channel users reaffirmed their support for the project and requested that USACE focus only on deepening the Texas City Channel project to a depth of 45-feet and maintaining the existing 400 feet width.

The Texas City Channel is a Federal deep-draft navigation project serving the Port of Texas City in Galveston County, Texas (Figure 1). It consists of a main channel connecting a turning basin at the port to the Gulf of Mexico through Bolivar roads, a part of the Houston Ship Channel (HSC). The main channel is 40 feet deep, 400 feet wide and about 6.8 miles long. The turning basin is 40 feet deep, 4,253 feet long, and ranges from 1,000 to 1,200 feet wide. An Industrial Canal, 40 feet deep and 300 to 400 feet wide extends 1.7 miles southwestward from the south end of the turning basin. The 40-foot channel was completed in June 1967.

The primary purpose of the deep-draft navigation project is to improve the navigational efficiency and safety of the existing waterway for movement of commerce and national security needs. An environmental opportunity also exists through the utilization of dredged material beneficially.

In April 2003 the City of Texas City (also the non-Federal Sponsor for the Federal Channel Deepening Project) received a Department of Army permit authorizing the construction of a six-berth marine container terminal including wharves, berthing areas, turning basin, and the deepening of the Texas City Channel to -45 feet MLT from the northern end of the turning basin to the intersection of the Texas City Channel and the Houston Ship Channel. The terminal facility would be constructed on approximately 400 acres of the active, leveed dredged material placement area known as Shoal Point, which is the primary placement area used for the placement of dredged material from the Texas City Channel. During the development of the Environmental Impact Statement (EIS) for the permit, a 50-year Dredged Material Management Plan (DMMP) was developed, not only to accommodate the dredged material from the berthing areas and the deepening of the channel, but to also include the maintenance material from the channel, including the existing turning basin.

The recommended Federal project plan for deepening the Texas City Channel and channel deepening portion of the permit for the container terminal are very similar. Both

projects would deepen the channel from the current depth of 40 feet to 45 feet. No channel widening is expected, other than the incidental widening recommended for the Federal project for bend easing purposes. The primary difference between the permitted plan and the recommended Federal project is that the Federal project plan includes the deepening of the existing turning basin, while the permitted plan would dredge a new turning basin within the channel directly adjacent to the berthing areas. In addition, the Federal project would place two rock groins on the north side of the Texas City Dike (located on the northern side of the channel) to help slow sedimentation of material back into the main channel.

The DMMP that was developed for the EIS will accommodate dredged material not only from the berthing areas for the container terminal but also material from the deepening of the channel and future maintenance material from the channel, including the existing turning basin. The DMMP includes an environmental opportunity through the utilization of dredged material beneficially. Approximately 1,000 acres of emergent marsh would be created adjacent to the project, according to the DMMP.

During the reevaluation of the Federal project it was determined that the EIS developed for the container terminal permit contained applicable environmental material that related to the current recommended plan. The related information is incorporated into the General Revaluation Report (GRR) by reference. In addition, since the DMMP developed for the permit satisfies Federal project requirements, it was adopted for the current Federal project plan with minor modifications (Section 7.3).

Based on the economic, engineering and environmental factors considered, the selected plan includes deepening the Texas City Turning Basin and Texas City Channel from the Turning Basin to the channel junction with the HSC to -45 ft MLT. This is also the locally preferred plan. A total of approximately 4.8 mcy of construction and maintenance grade material would require separate dredging contracts to complete. The work is estimated to begin in 2008 and be complete by 2010.

The deepening and incidental widening of the Texas City Channel will generate annual benefits of \$20,822,000 with annual costs of \$3,302,000, producing a benefit-cost ratio of 6.3. The project benefits presented in this report are for a 50 year period of economic evaluation and are based on a Federal discount rate of 4.875 percent, and fiscal year 2005 vessel operating costs.

The project cost of all project components, minus inflation and interest during construction, totals \$54,490,000. The total investment cost of all components totals \$60,905,000, and includes \$54,490,000 in project costs, \$2,624,000 in interest during construction for project components, \$2,683,000 in associated costs and \$1,108,000 in mitigation costs. Total average annual costs for the project are \$3,411,000.

The recommended navigation improvements are the locally preferred plan.